APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/537,501	06/03/2005	Jorg Heuer	112740-1080	3486

29177   7590   04/04/2008
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EXAMINER
TSUI, WILSON W

ART UNIT	PAPER NUMBER
2178	

MAIL DATE	DELIVERY MODE
04/04/2008	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

	Application No.	Applicant(s)	
Office Action Summary	10/537,501	HEUER ET AL.	
	Examiner	Art Unit	
	WILSON TSUI	2178	

-- *The MAILING DATE of this communication appears on the cover sheet with the correspondence address* --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) OR THIRTY (30) DAYS,
WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed
  after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any
  earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) ☒ Responsive to communication(s) filed on <u>07 January 2008</u>.
2a) ☐ This action is **FINAL.**   2b) ☒ This action is non-final.
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is
   closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) ☒ Claim(s) <u>17-30</u> is/are pending in the application.
   4a) Of the above claim(s) _____ is/are withdrawn from consideration.
5) ☐ Claim(s) _____ is/are allowed.
6) ☒ Claim(s) <u>17-30</u> is/are rejected.
7) ☐ Claim(s) _____ is/are objected to.
8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9) ☐ The specification is objected to by the Examiner.
10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
    a) ☐ All b) ☐ Some * c) ☐ None of:
    1. ☐ Certified copies of the priority documents have been received.
    2. ☐ Certified copies of the priority documents have been received in Application No. _____.
    3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage
       application from the International Bureau (PCT Rule 17.2(a)).
    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
   Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413)
   Paper No(s)/Mail Date. _____
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

1.   This action is in response to the RCE filed on: 01/07/08.

2.   Claims 1-16 are cancelled. Claims 17, 23, 29, and 30 are amended. Claims 17-

30 are pending. Claims 17, 23, 29, and 30 are independent claims. Claims 17, 23, 29,

and 30 are amended.

3.   Claims 17-30 remain rejected under 35 U.S.C. 103(a) as being unpatentable

over Wan, further view of Hunter.

Priority

4.   Acknowledgment is made of applicant's claim for foreign priority under 35 U.S.C.

119(a)-(d) with respect to PCT/EP03/13511 filed on 01/12/2003, foreign priority based

on application filed in Germany on 12/03/2002, and foreign priority based on application

filed in Germany on 08/29/2003.

Claim Rejections - 35 USC § 103

        The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set
> forth in section 102 of this title, if the differences between the subject matter sought to be patented and
> the prior art are such that the subject matter as a whole would have been obvious at the time the
> invention was made to a person having ordinary skill in the art to which said subject matter pertains.
> Patentability shall not be negatived by the manner in which the invention was made.

5.   Claims 17-30 remain rejected under 35 U.S.C. 103(a) as being unpatentable

over Wan (US Application: US 2004/0028049 A1, published: Feb. 12, 2004, filed: Oct.

5, 2001), further view of Hunter ("An Overview of the MPEG-7 Description Definition

Language (DDL)", published: June, 2001, pages 765-772).

With regards to claim 17, Wan teaches a method for encoding an XML-based document including contents according to an XML schema language definition (paragraph 0021), said method comprising the steps of:

- *Generating a coded binary representation of the document* (whereas, a binary representation of the document is implemented through encoding) *by assigning binary structure codes to the contents of the document via code tables* (paragraphs 0011, 0017, 0044: whereas, a structure stream is encoded with code tables.)

- *Assigning structure codes to textual contents of datatypes* (paragraphs 0049, 0050, 0054: whereas structure codes are assigned to data types).

- *… to allow the textual content to be filtered out from the binary representation so that subsequent decoding does not have to decode the entire binary representation* (paragraphs 0103, and 110-112: whereas, text content can be filtered out from the binary representation via offsets and thus the entire binary representation does not have to be decoded)

However, Wan does not expressly teach the datatypes are *of a complex type data type with a mixed content model*.

Hunter teaches the datatypes are *of a complex type data type with a mixed content model* (page 768, S768: whereas, datatypes include complex type data with a mixed content model.)

It would have been obvious to one of the ordinary skill in the art at the time of the invention to have modified Wan's binary encoding of datatypes, to have further included

the complex datatypes for describing an MPEG stream, as taught by Hunter. The combination of Wan and Hunter would have allowed Wan to have "allowed children elements in their (complex types) content and may carry attributes" (page 767, S767: Hunter).

With regards to claim 18, which depends on claim 17, Wan and Hunter teach *wherein the assignment of the structure codes to the textual contents of a complex type data type with mixed content model*, as similarly explained in the rejection for claim 17, and is rejected under similar rationale. Furthermore, Wan teaches the assignment of structure codes *is effected exclusively via OperandTBC coding tables* (page 13: whereas, an ID code table is used to store hierarchical/tree data for a set of nodes).

With regards to claim 19, which depends on claim 17, Wan and Hunter teach *wherein the textual contents of a complex type data type with the mixed content model*, as similarly explained in the rejection for claim 17, and is rejected under the same rationale. Additionally, Wan teaches the textual contents are further *assigned position codes* (paragraph 0109: whereas node locators are used for assigning position codes).

With regards to claim 20, which depends on claim 19, Wan teaches *wherein single element position codes and/or multiple element position codes are used in the assignment of the position codes* (paragraph 0102, 0109: whereas, one or more node locators are used for assigning position codes).

With regards to claim 21, which depends on claim 19, Wan teaches *wherein the position codes are encoded using codes of variable length* (paragraph 0104: whereas each node/node-locator includes a variable size field).

With regards to claim 22, which depends on claim 21, Wan teaches *wherein the position codes are encoded using a code vluimsbf5* (page 11: whereas, as declared in the 'size_in_byte' field of a bit stream, a variable length unsigned integer, and most significant bit(s)-first, format is used as part of the encoding process).

With regards to claim 23, Wan teaches *a method for decoding a binary representation of an XML-based document* (paragraph 0075), comprising:
Receiving a coded binary representation of the document by assigning binary structure codes to the contents of the document via code tables: (paragraphs 0011, 0017, 0044: whereas, a structure stream is encoded and then decoded with code tables);
Assigning structure codes to textual contents of datatypes (paragraphs 0049, 0050, 0054: whereas structure codes are assigned to data types).
Converting the assigned structure codes into the textual contents of the XML-based document that were assigned to the structure codes (paragraph 0075: whereas, a decoder implements the conversion process).
… to allow the textual content to be filtered out from the binary representation so that subsequent decoding does not have to decode the entire binary representation

(paragraphs 0103, and 110-112: whereas, text content can be filtered out from the binary representation via offsets and thus the entire binary representation does not have to be decoded)

However, Wan does not expressly teach the datatypes are *of a complex type data type with a mixed content model.*

Hunter teaches the datatypes are *of a complex type data type with a mixed content model* (page 768, S768: whereas, datatypes include complex type data with a mixed content model.)

It would have been obvious to one of the ordinary skill in the art at the time of the invention to have modified Wan's binary encoding of datatypes, to have further included the complex datatypes for describing an MPEG stream, as taught by Hunter. The combination of Wan and Hunter would have allowed Wan to have "allowed children elements in their (complex types) content and may carry attributes" (page 767, S767: Hunter).

With regards to claim 24, which depends on claim 23, Wan teaches *wherein the assignment is effected by means of structure codes (SBC) via OperandTBC coding tables* (page 13: whereas, an ID code table is used to store hierarchical/tree data for a set of nodes), and also paragraph 0075, whereas a complementary decoder process is implemented.

With regards to claim 25, which depends on claim 23, Wan and Hunter teaches *wherein binary representations of textual contents of a "complex type" data type with the "mixed" content model*, as similarly explained in the rejection for claim 23, and is rejected under similar rationale. Additionally Wan teaches *addressed by means of "position codes" are further converted into textual contents at the assigned position* (paragraphs 0109-0112: whereas, reconstruction/decoding takes place by converting into textual contents at the assigned position).

With regards to claim 26, which depends claim 25, Wan teaches wherein *the "position codes" comprise "single element position codes" (SPC) and/or "multiple element position codes" (MPC)* (paragraphs 0102, 0109 : whereas, one or more node locators are used for position codes).

With regards to claim 27, which depends on claim 25, Wan teaches wherein the *"position codes" are encoded using codes of variable length* (paragraph 0104: whereas each node/node-locator includes a variable size field)

With regards to claim 28, which depends on claim 27, Wan teaches *wherein the "position codes" are encoded using a code vluimsbf5* (page 11: whereas, as declared in the 'size_in_byte' field of a bit stream, a variable length unsigned integer, and most significant bit(s)-first, format is used as part of the encoding process).

With regards to claim 29, for a device performing a method similar to the method of claim 17, is rejected under similar rationale.

With regards to claim 30, for a device performing a method similar to the method of claim 23, is rejected under similar rationale.

Response to Arguments

6.   Applicant's arguments filed 01/07/08 have been fully considered but they are not persuasive.

With regards to claim 17, the applicant argues (page 5 of applicant remarks) that "mixed models" could not be implemented in Wan given the critical separation of text from the structure". However, this argument is not persuasive since a mixed content model is generated since the actual text is separated from structure; yet the text can still be accessed through node locators from the structure data (Wan, paragraph 0109-112). The applicant secondly argues (page 5 of applicant remarks) that no provisions in Wan deal with complex data types, however, In response to applicant's arguments against the references individually, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986). Wan shows structure codes of one or more data types and elements as explained in the rejection for claim 17 above; and furthermore Hunter is used in combination with Hunter to show that elements can be of various types including complex data types to implement mixed content models (Hunter, pages 767,

768). Thus, the combination of Wan and Hunter teach the claim limitation, and the applicant's argument is not persuasive.

7.   With regards to claims dependent upon claim 17 being allowable since claim 17 is allowable is not persuasive; since claim 17 has been explained/shown to be rejected.

8.   With regards to claims 23, 29, 30, and their respective dependent claims being allowable for similar reasons; is not persuasive since claim 17 has been shown/explained to be rejected.

Conclusion

9.   Any inquiry concerning this communication or earlier communications from the examiner should be directed to WILSON TSUI whose telephone number is (571)272-7596. The examiner can normally be reached on Monday - Friday.

    If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Stephen Hong can be reached on (571) 272-4124. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the

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published applications may be obtained from either Private PAIR or Public PAIR.

Status information for unpublished applications is available through Private PAIR only.

For more information about the PAIR system, see http://pair-direct.uspto.gov. Should

you have questions on access to the Private PAIR system, contact the Electronic

Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a

USPTO Customer Service Representative or access to the automated information

system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

                                              /CESAR B PAULA/
                                              Primary Examiner, Art Unit 2178
/Wilson Tsui/

Wilson Tsui
Patent Examiner
Art Unit: 2178
March 22, 2008.
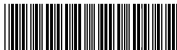
	Application/Control No.	Applicant(s)/Patent under Reexamination
Application Number	10/537,501	HEUER ET AL.
	Examiner	**Art Unit**	
	WILSON TSUI	2178	